

### **Remarks/Arguments**

Claims 1 through 18 are pending and stand rejected. Claim 1 is objected to because the recitation “vaporizer” is misspelled in line 4. Claim 1 is amended herein to correct the misspelling.

Claims 6-10 are rejected under 35 U.S.C. § 112, para. 2 because the recitations “vaporization chamber” and “source of heat” lack antecedent basis. Claims 6-7 and 9-11 are amended herein to depend upon claim 5 rather than claim 1. Claim 5 provides the proper antecedent basis for these recitations. Applicants request entry of these amendments and removal of the rejections of the claims.

Claims 1 and 18 are amended herein to add the recitation “an electronic control module that is in electrical communication with the flow rate controller and the vaporizer module to deliver the chemical reagent vapors through the vaporized gas outlet at a certain flow rate based upon information received from the vaporizer module.” Support for this recitation is provided, for example, in the specification at page 8, lines 2 through 11 and Figures 1 - 3. Claim 13 was amended herein to correct minor clerical errors. Applicants respectfully request that the Examiner enter the above claim amendments.

New claim 19 is added herein. Claim 19 is being presented at this time to more completely cover a particular aspect of Applicants’ invention. Further, it is submitted that new claim 19 raises no new issues and does not require the Examiner to conduct an additional search, since the claims merely clarify the subject matter already presented. Support for new claim 19 is found, for example, in the specification at page 8, lines 2 through 11 and Figures 1 and 3. Applicants respectfully request that the Examiner enter the above new claim.

Claims 1-2, 14, 16, and 18 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U. S. Pat. No. 5,952,046 (“Chayka”). Dependent claims 4; 3; 5-10 and 12-13; 9-11; 15; and 17 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chayka in view of U. S. Pat. Nos. 4,436,974 (“McMenamin”), 6,098,964 (“Schmitt”), 5,698,037 (“Stauffer”) and further in view of U. S. Pat. No. 5,556,479 (“Bran”), Stauffer in view of U. S. Pat. No. 4,539,221 (“Jacob”), Stauffer in view of U. S. Pat. No. 4,321,031 (“Woodgate”), and U. S. Pat. No. 5,966,499 (“Hinkle et al.”), respectively. These rejections are respectfully traversed.

Applicants respectfully traverse the prior art rejections of the claims because the rejections are rendered moot in view of the current amendments to the claims. Claims 1 and 18, and claims 2-17 which depend therefrom, include the recitation “an electronic control module that is in electrical communication with the flow rate controller and the vaporizer module to deliver the chemical reagent vapors through the vaporized gas outlet at a certain flow rate based upon information received from the vaporizer module.” Chayka -alone or in combination with the other cited references- fails to disclose all of the required elements of these claims nor does Chayka -alone or in combination with the other cited references- provide a motivation, suggestion or teaching of the desirability of making the specific invention claimed by the Applicants.

Chayka describes a delivery system wherein a liquid source 114 stored in reagent reservoir 112 is vaporized in vaporizer 136 and delivered to a reactor 142 (see Chayka at Fig. 3 and col. 11, lines 39-64). A liquid mass flow controller 150 is used to conduct liquid directly from the reagent reservoir 112 to vaporizer 136 (see id. at col. 11, lines 48-52). Chayka regulates the amount of liquid source that enters into vaporizer 136 through a liquid mass flow controller 150 (see id. at col. 11, lines 48-52). Chayka fails, however, to disclose, *inter alia*, an electronic control module that is in electrical communication with the vaporizer

module to influence the output (i.e., flow rate, etc.) of the chemical reagent vapors based upon information obtained from the vaporizer module as required in Applicants' claims. Consequently, the 102 rejections of the newly amended claims 1 and 18 and the claims that depend therefrom in view of Chayka are unsupported and should be withdrawn.

The combination of Chayka with one or more of the following references, McMenamin, Schmitt, Stauffer, Bran, Jacob, Woodgate, and Hinkle, fails to render obvious the claimed invention, nor is there any teaching, suggestion, or motivation within any of these references to make the combination. Of the foregoing references, Stauffer, is the only one that describes an apparatus having an electronic control unit 17 (see Stauffer at Fig. 1 and col. 3, lines 53-67 through col. 4, lines 1-4). However, the electronic control unit 17 is coupled to a capacitance manometer 18 attached to the processing unit 10 that monitors the pressure within the processing chamber (see *id.* at col. 3, lines 53-58). From the feedback signals of manometer 18, control unit 17 controls the proportioning pressure valve 21 (and its heating) to maintain the processing chamber at the desired pressure (see *id.* at col. 3, lines 66-67 through col. 4, lines 1-2 and col. 5, lines 19-32). This information is obtained downstream of chemical delivery module 11.

In view of the foregoing, Applicants respectfully request that the obviousness rejections of the amended claims 1 and 18 and claims 2-17 which depend therefrom as allegedly being unpatentable over the combination of Chayka in one of more of the foregoing references, respectively, be removed. The additional references fail to remedy the deficiencies of Chayka.

**SUMMARY**

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned Attorney at the telephone number listed below.

Respectfully submitted,

  
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